IN THE CLAIMS:

1. (currently amended) A method performed by a data processing system having a memory, comprising the steps of:

inputting a CCFG;

augmenting the CCFG with data edges to produce an augmented CCFG;

scheduling the augmented CCFG to produce a scheduled augmented CCFG;

selecting a first node of the scheduled augmented CCFG;

producing a first copy of the first node for an SCFG; and

coupling, if a first thread of the first node is suspended, between a second node of the SCFG of a second previously-running thread and the first copy, a first context switch.

~~inputting an order of the CCFG nodes; and~~

~~translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.~~

2. (currently amended) The method of claim 1, wherein the first~~each~~ context switch is achieved by adding code that saves a state of a thread being suspended in a state variable and resumes another thread by performing a multiway branch on a state variable for a thread being resumed.

3. (original) The method of claim 1, wherein the translation of the CCFG into the SCFG produces, for each node of the CCFG, at most one corresponding node in the SCFG.

4. (currently amended) The method of claim 1, wherein the step of scheduling comprises ~~further comprising~~ a topological sort for determining the scheduled augmented CCFG~~ACCFG order~~.

5. (original) The method of claim 1, wherein an execution of the SCFG comprises translation of the SCFG into a programming language.

6. (original) The method of claim 5, wherein the programming language is C.

7. (original) The method of claim 1, further comprising a step of translation of the SCFG into a programming language.

8. (original) The method of claim 7, further comprising a step of executing the programming language translation of the SCFG.

9. (original) The method of claim 1, wherein an execution of the SCFG comprises interpretation of the SCFG.

10. (currently amended) A data processing system having a memory, comprising the following:

a sub-system configured for inputting a CCFG;

a sub-system configured for augmenting the CCFG with data edges to produce an augmented CCFG;

a sub-system configured for scheduling the augmented CCFG to produce a scheduled augmented CCFG;

a sub-system configured for selecting a first node of the scheduled augmented CCFG;

a sub-system configured for producing a first copy of the first node for an SCFG; and

a sub-system configured for coupling, if a first thread of the first node is suspended, between a second node of the SCFG of a second previously-running thread and the first copy, a first context switch.

~~a sub-system for inputting an order of the CCFG nodes; and~~

~~a sub-system for translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.~~

11. (currently amended) A computer program product comprising a computer usable medium having computer readable code embodied therein, the computer program product including:

computer readable program code devices configured to cause a computer to effect inputting a CCFG;

computer readable program code devices configured to cause a computer to effect augmenting the CCFG with data edges to produce an augmented CCFG;

computer readable program code devices configured to cause a computer to effect scheduling the augmented CCFG to produce a scheduled augmented CCFG;

computer readable program code devices configured to cause a computer to effect selecting a first node of the scheduled augmented CCFG;

computer readable program code devices configured to cause a computer to effect producing a first copy of the first node for an SCFG; and

computer readable program code devices configured to cause a computer to effect coupling, if a first thread of the first node is suspended, between a second node of the SCFG of a second previously-running thread and the first copy, a first context switch.

~~computer readable program code devices configured to cause a computer to effect inputting an order of the CCFG nodes; and~~

~~computer readable program code devices configured to cause a computer to effect translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.~~

12. (currently amended) A computer data signal embodied in a carrier wave and representing sequences of instructions which, when executed by a processor, cause performance of steps of:

inputting a CCFG;

augmenting the CCFG with data edges to produce an augmented CCFG;

scheduling the augmented CCFG to produce a scheduled augmented CCFG;

selecting a first node of the scheduled augmented CCFG;

producing a first copy of the first node for an SCFG; and

coupling, if a first thread of the first node is suspended, between a second node of the SCFG of a second previously-running thread and the first copy, a first context switch.

~~inputting an order of the CCFG nodes; and~~

~~translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.~~